

AMENDMENT UNDER 37 C.F.R. § 1.114(c)

U.S. Application No.: 09/940,474

Attorney Docket No.: Q65911

### **REMARKS**

Claims 1, 2, 4-8 and 10-13 are all the claims pending in the application. Claims 3-4 and 9 have been deleted. Claim 1 has been amended to delete the recitation of “the thickness of the spacer is from 0.02 to 3  $\mu\text{m}$ ,” and to add the feature of “the spacer comprises a fluorine containing polymer.” Dependent Claim 7 and independent Claim 12 have been amended to recite “the spacer comprises a fluorine containing polymer.” Support for the amendment can be found for example at, canceled Claim 9, and the paragraph bridging pages 12-13 in the present specification. Claim 10 has been amended to correct their dependencies in view of the cancellation of Claims 3 and 4. New dependent Claim 13 has been added, reciting the feature of Claim 1 that has been deleted herein, directed to the feature that the thickness of the spacer is from 0.02 to 3  $\mu\text{m}$ . Thus, no new matter has been added herein.

Applicants note with appreciation that at page 2, paragraph 1 of the Office Action dated July 3, 2006, it is indicated that the rejection of Claims 1-2 and 4-12 under 35 U.S.C. § 102(e) as being anticipated over U.S. Patent No. 6,447,958 to Shinohara et al. (“Shinohara”) has been overcome.

Referring to pages 2-3 of the Office Action, Claims 1-2, and 4-12 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shinohara. Applicants respectfully traverse for the following reasons.

As amended herein, Claim 1 is directed to a separator for non-aqueous electrolyte secondary battery, wherein the separator comprises a shut-down layer, a heat-resistant microporous layer, and a spacer having a form of particles, fibers, net or porous film on the

AMENDMENT UNDER 37 C.F.R. § 1.114(c)  
U.S. Application No.: 09/940,474  
Attorney Docket No.: Q65911

surface of the heat-resistant microporous layer. The heat-resistant microporous layer comprises at least one heat-resistant resin selected from resins having a temperature of deflection under load of  $18.6 \text{ kg/cm}^2$  of  $100^\circ\text{C}$  or more and the spacer comprises a fluorine-containing polymer.

Claim 12 is directed to a separator for non-aqueous electrolyte secondary battery, the separator comprising a shut down layer, a heat-resistant microporous layer, and a spacer having a form of particles, fibers, net or porous film, on the surface of the heat-resistant microporous layer. The heat-resistant microporous layer comprises at least one heat-resistant resin selected from resins having a temperature of deflection under load of  $18.6 \text{ kg/cm}^2$  of  $100^\circ\text{C}$  or more, and the shut-down layer, the heat-resistant microporous layer and the spacer being in this order, wherein the spacer comprises a fluorine containing polymer.

As discussed above, Claims 1, 7 and 12 have been amended to recite the feature of “the spacer comprises a fluorine containing polymer.” Shinohara fails to teach or suggest a spacer comprising a fluorine containing polymer. Rather, as acknowledged at the paragraph bridging pages 2-3 in the Office Action, Shinohara merely discloses a separator comprising “a thermoplastic spacer formed a fine particle-like suspension (col. 10, lines 1-10)” and a separator where “the spacer consists of an electrochemically stable polyolefine (col. 14, lines 43-53).” No where in Shinohara is a spacer comprising a fluorine-containing polymer taught or suggested, as recited in Claims 1, 7 and 12.

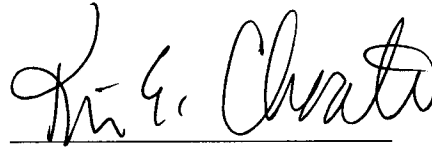
In view of the above, Claims 1-2, and 4-12 are patentable and unobvious over Shinohara. Accordingly, withdrawal of this rejection is respectfully requested.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)  
U.S. Application No.: 09/940,474  
Attorney Docket No.: Q65911

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kim E. Choate", written over a horizontal line.

Kim E. Choate  
Registration No. 57,102

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: June 4, 2007